

### ABSTRACT OF THE DISCLOSURE

An apparatus and method of a scan controller for multi-sets of motors and sensors. The apparatus comprises a plurality of shift registers, a plurality of latch registers and a plurality of multiplexes. The shift registers are used to receive and transmit data. The  
5 latch registers are used to maintain data corresponding to the outputs of shift registers. The multiplexes are installed between the motor control data and sensors data to select the data of the shift registers.